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Nota di contenuto	Session 1: Keynotes -- Automatic Generation of Workflow Provenance -- Managing Rapidly-Evolving Scientific Workflows -- Session 2: Applications -- Virtual Logbooks and Collaboration in Science and Software Development -- Applying Provenance in Distributed Organ Transplant Management -- Provenance Implementation in a Scientific Simulation Environment -- Towards Low Overhead Provenance Tracking

in Near Real-Time Stream Filtering -- Enabling Provenance on Large Scale e-Science Applications -- Session 4: Semantics 1 -- Harvesting RDF Triples -- Mapping Physical Formats to Logical Models to Extract Data and Metadata: The Defuddle Parsing Engine -- Annotation and Provenance Tracking in Semantic Web Photo Libraries -- Metadata Catalogs with Semantic Representations -- Combining Provenance with Trust in Social Networks for Semantic Web Content Filtering -- Session 5: Workflow -- Recording Actor State in Scientific Workflows -- Provenance Collection Support in the Kepler Scientific Workflow System -- A Model for User-Oriented Data Provenance in Pipelined Scientific Workflows -- Applying the Virtual Data Provenance Model -- Session 6: Models of Provenance, Annotations and Processes -- A Provenance Model for Manually Curated Data -- Issues in Automatic Provenance Collection -- Electronically Querying for the Provenance of Entities -- AstroDAS: Sharing Assertions Across Astronomy Catalogues Through Distributed Annotation -- Session 8: Systems -- Security Issues in a SOA-Based Provenance System -- Implementing a Secure Annotation Service -- Performance Evaluation of the Karma Provenance Framework for Scientific Workflows -- Exploring Provenance in a Distributed Job Execution System -- gLite Job Provenance -- Session 9: Semantics 2 -- An Identity Crisis in the Life Sciences -- CombeChem: A Case Study in Provenance and Annotation Using the Semantic Web -- Principles of High Quality Documentation for Provenance: A Philosophical Discussion.

Sommario/riassunto

Provenance is a well understood concept in the study of the art, where it refers to the documented history of an art object. Given that documented history, the object attains an authority that allows scholars to understand and appreciate its importance and context relative to other works. In the absence of such history, art objects may be treated with some skepticism by those who study and view them. Over the last few years, a number of teams have been applying this concept of provenance to data and information generated within computer systems. If the provenance of data produced by computer systems can be determined as it can for some works of art, then users will be able to understand (for example) how documents were assembled, how simulation results were determined, and how financial analyses were carried out. A key driver for this research has been e-Science. Reproducibility of results and documentation of method have always been important concerns in science, and today scientists of many fields (such as bioinformatics, medical research, chemistry, and physics) see provenance as a mechanism that can help repeat scientific experiments, verify results, and reproduce data products. Likewise, provenance offers opportunities for the business world, since it allows for the analysis of processes that led to results, for instance to check they are well-behaved or satisfy constraints; hence, provenance offers the means to check compliance of processes, on the basis of their actual execution. Indeed, increasing regulation of many industries (for example, financial services) means that provenance recording is becoming a legal requirement.